

POSTED
0103-22-00

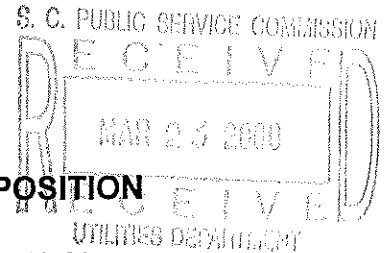
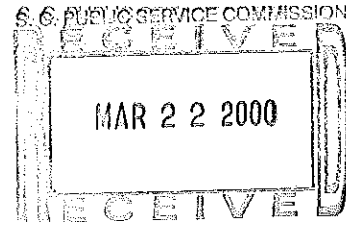
DIRECT TESTIMONY

OF

MIKE C. SUMMER

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY



**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION
WITH SOUTH CAROLINA ELECTRIC & GAS COMPANY (SCE&G)**

A. Mike C. Summer, 111 Research Drive, Columbia, South Carolina. I am
employed by SCE&G as General Manager of Fossil & Hydro Technical
Services.

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
PROFESSIONAL EXPERIENCE.**

A. I have an Associates Degree from Midlands Technical College in Nuclear
Engineering Technology. SCE&G employed me in June of 1973 as a
Nuclear Health Physics Technician. I was initially assigned to McMeekin
Station and worked in all areas of operations and maintenance. During my
career with SCE&G, I have held various positions in Nuclear
Environmental, Quality Control, Health Physics, and Fossil/Hydro
Generation. I was the Plant Manager of McMeekin Station for 13 years
(from 1983 to 1996). In October of 1996, I assumed the position of
Manager of fossil & Hydro Operations. In 1998, I became General
Manager of Fossil & Hydro Operations, and effective February 1, 2000

RETURN DATE: OK DBW
SERVICE: OK DBW

1 became General Manager of Technical Services for Fossil & Hydro
2 Generation. I report directly to the Vice President of Fossil & Hydro
3 Operations.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 **A.** The purpose of my testimony is to review the operating performance of
6 South Carolina Electric & Gas Company's fossil units and GENCO's
7 Williams Station during the period March 1, 1999, through February 29,
8 2000.

9 **Q. PLEASE GIVE A SHORT DESCRIPTION OF SCE&G'S FOSSIL AND**
10 **HYDRO ELECTRIC FACILITIES.**

11 **A.** SCE&G owns and/or operates sixteen (16) fossil fuel (coal and gas)
12 generating plants and six (6) hydroelectric generating plants. The total net
13 Summer generating capability rating of these facilities is 3,848 megawatts.

14 **Q. HOW MUCH ELECTRICITY WAS GENERATED BY SCE&G IN THE**
15 **TWELVE MONTH REVIEW PERIOD?**

16 **A.** In the review period, SCE&G generated 23,055,220 megawatt hours of
17 energy. Of this energy 74.01% was generated by our fossil steam plants;
18 4.56% was generated by gas turbine and hydro facilities; and 21.43% was
19 generated by our nuclear plant.

20 **Q. PLEASE SUMMARIZE THE PERFORMANCE OF THE FOSSIL UNITS.**

21 **A.** Overall, SCE&G'S fossil units have operated efficiently and dependably in
22 the twelve-month period ending on February 29, 2000. SCE&G's steam

1 plants completed this review period with an availability of 84.34%, a
2 1.5% improvement over last year.

3 Availability is the measure of actual hours that generation units are
4 available compared to the total hours in the period being considered.

5 Availability is a good indication of overall unit performance since there is
6 no affect by how the units are dispatched or by demand on the system. By
7 comparison, the NERC five-year average of availability of similar sized
8 units from 1994-1998 is 86.37%.

9 Forced outage rate is another measure of unit performance. The forced
10 outage rate is the percentage of total hours that generating units are
11 forced out of service for various reasons compared with the sum of total
12 service and forced outage hours. SCE&G's steam plants completed this
13 review period with a forced outage rate of 3.11%. By comparison, the
14 NERC five year average of forced outage rate of similar sized units from
15 1994-1998 is 4.81%.

16 **Q. PLEASE DISCUSS SCE&G'S OUTAGES FOR THE PERIOD UNDER**
17 **REVIEW.**

18 Major outages were scheduled for Canadys, Cope, and McMeekin Steam
19 plants and at Fairfield Pumped Storage. Two of the eight units at Fairfield
20 Pumped Storage were taken out of service in December 1999 for an
21 upgrade to increase their efficiency and capacity. They will be back in
22 service by June 2000. This is the first phase of a four-year plan to
23 upgrade two units each year at Fairfield Pumped Storage. Most of the

1 other scheduled outages were for replacements, retrofits or upgrades of
2 environmental equipment. For example, a cooling tower, cooling tower fill,
3 low Nox burners and a baghouse were installed on various units at
4 Canadys. We replaced bags and made improvements to baghouse
5 compartments at Cope and upgraded an electrostatic precipitator at
6 Canadys. In addition to these retrofits of environmental equipment, we
7 scheduled outages to perform maintenance, replacements or upgrades for
8 other major plant equipment such as high and low pressure turbines,
9 boiler tubes, and induced fans at Canadys, as well as a coal pulverizers at
10 McMeekin.

11 **Q. WHAT HAS BEEN THE HEAT RATE OF THE FOSSIL UNITS DURING**
12 **THE REVIEW PERIOD?**

13 **A.** The fossil units heat rate was very good. Heat rate is a way to measure
14 thermal efficiency of a power plant fuel cycle. It is the number of BTU's of
15 fuel required to generate one (1) kilowatt-hour of electricity.

16 In the October 1999 edition of Electric Light & Power, SCE&G is rated 9th
17 (9,628 Btu/kWh) of the coal-fired fleet heat rates - top 50 companies. Also,
18 SCE&G had 3 steam plants in the coal-fired heat rates – 25 best plants;
19 Cope is rated 10th (9,236 Btu/kWh), McMeekin is rated 14th (9,310
20 Btu/kWh), and Wateree is rated 15th (9,373 Btu/kWh).

21 The combined Steam and Gas turbines heat rate for the period March 1,
22 1999 through February 29, 2000 is 9919 Btu/kWh.

1 **Q. IN OPERATING ITS FOSSIL AND HYDRO PLANTS, HAS SCE&G**
2 **TAKEN ALL REASONABLE STEPS TO MINIMIZE THE FUEL COST TO**
3 **CUSTOMERS?**

4 **A.** Yes. SCE&G has operated our plants as efficiently and reliably as
5 reasonably possible to minimize the fuel costs to our Customers. Our heat
6 rate Ranking in the October 1999 edition of Electric Light & Power attests
7 to our efficiency efforts. In addition, we have performed coal pulverizer
8 modifications at McMeekin Station that should allow for burning a lower
9 cost fuel. Although SCE&G will continue to operate our plants as
10 efficiently and reliably as possible, other operating factors remain that may
11 impact our future efficiency, such as, compliance with ever changing
12 environmental regulations.

13 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

14 **A.** Yes.